Uromic TANGO\textsuperscript{16} is unique 16-channel multifunctional polygraph for biomedical measurements where all measuring channels can be individually configured to fulfill the needs of standard functional diagnostics and experimental measurements in different applications (urology, urogynecology, paediatrics, surgery and gastroenterology).

The system can work with wide range of transducers that are connected by cable or wirelessly with own communication protocol protected against signal interference.

The compact system has all needed modules built inside its ergonomic case, including original high-quality mechanical parts as precise peristaltic pump for filling cystometry and profilometry or unique sterilizable profilometric puller.

The unit supports videourodynamics—either single images or cine loop (input for X-ray, ultrasound endoscope and other image data).

Built-in ultrasound module for B mode. Optional CFM mode and Power angio doppler mode.

Standard software:

- Urodynamics measurement protocole (uroflowmetry, filling and miction cystometry, PQ study, VLPP, Urethra Pressure Profile, EMG and biofeedback).
- Anorectal and esophageal manometry.
- Software module for creation own protocols.
- Freely programmable measurement protocols especially for research and special applications.
Uromic Tango®16

Uromic Tango®16 is 16-channel multifunctional polygraph for biomedical measurements. Universal inputs for measurements using wide range of transducers connected by cable or wirelessly. Simple software definition of measurement protocols enables use in different applications. Number of channels allows to use more types of transducers for certain measurements. The system can be used for standard functional diagnostics or experimental measurements in wide range of applications (urology, urogynecology, paediatrics, surgery and gastroenterology). Two mechanical peripheries can be connected (cystometric/profilometric pump, puller). Measured data can be combined and synchronically recorded together with image data (videourodynamics). Built-in ultrasound module for B mode. Ultrasound module for CFM mode and Power angio doppler can be built-in as an option.

- **Uroflowmeter**
  - Standard weight flow transducer (standardly one, optimum two), possibility of spinning disc sensor connection.
  - Flow range: 0 – 50 mℓ/s, volume 0 – 1250 ml
  - Accuracy: +/- 5 % of the range

- **Pressure measurements**
  - Number of channels: 12 (up to 16 when UFM/EMG channels are used)
  - Large spectrum of pressure sensors: Air charged T-Doc, Micro Tip catheters for urodynamics and anorectal manometry. Classic transducers for pressure transmission by water column (single use or reusable with replaceable domes).
  - Standard measurement range: – 50 to +250 cm H2O
  - Accuracy: +/- 5 % of the range

- **EMG**
  - Standard number of channels: 2
  - Frequency: 1 Hz–10 kHz (–6 dB)
  - EMG processing: EMG envelope, EMG curve

- **Puller for profilometry**
  - Sterilizable catheter holder, dezinfected engine unit.
  - Speed of pull out: 0,5; 1; 2; 3; 4; 5 mm/s
  - Accuracy: +/- –3 % of the range
  - Usable length: 200 mm

- **Cystometric / profilometric pump**
  - Precise original mechanic construction of peristaltic pump, adjustable for more pump sets.
  - Range: 0,5–120 ml/minute

- **System**
  - Inbuilt control system: Nexcom industrial fanless computer
  - Display: flat, 19” anti glare display
  - Control: PC keyboard, standard size, trackball
  - Interface: USB port
  - System: MS Windows XP embedded or W7, MS Word

- **Diagnostic protocols**
  - Programmable with user friendly software.

- **Standard software includes:**
  - **Urodynamics:**
    - UFM, automatic UFM
    - Cystometry (filling and voiding cystometry)
    - PQ study analyses: Schafer, Chess, A – G
    - PURR, LPURR, URR, QLPP (conductivity)
    - Leak Point Pressure (ALPP, VLPP, CLPP)
    - Video LPP, UPP
    - EMG, EMG biofeedback
  - **Anorectal and esophageal manometry:**
    - 4 - 8 channels anorectal manometry
    - 4 - 8 channels esophageal
    - Volume Vector analysis
  - **Urodynamics Data Viewer**
  - data analysis on another computer

- **Ultrasound**
  - Built-in ultrasound module enables complex examination; abdominal or introital ultrasonography (3-7 MHz transducer); transrectal or transvaginal ultrasonography (5-8 MHz transducer). B mode examination, colour doppler mapping and Power angio doppler imaging. Pulse doppler is displayed in triplex mode.

- **Videourodynamics**
  - Fast videograbber for full PAL definition
  - Input: 720 x 576, 25 frames/sec
  - Record: single image and cineloop record
  - Image processing: Cineloop/single images
  - Copy to report
  - Angle measurement
  - Distance measurement

- **Software for external image data recording**
  - DigiPict 2.0

- **Dimensions**
  - Height: 105 cm, width: 60 cm, depth: 70 cm, weight: 60 kg
  - Language: Czech, English, German, Russian, French, Danish.
  - Technology for simple creating of another local language version.

- **Safety**
  - IEC EN 60601-1. Class I, type BF (Medical Electrical Equipment)
  - CE0434 - marked (EU medical device direct 93/42 EEC).
  - Voltage: 230 V +/- 10 % 50-60 Hz
  - Power supply: max. 600 VA